

PATENT COOPERATION TREATY

**PCT**

**INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>X16440</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/US2004/039766</b>	International filing date (day/month/year) <b>15/12/2004</b>	(Earliest) Priority Date (day/month/year) <b>22/12/2003</b>
Applicant <b>ELI LILLY AND COMPANY</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b.  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2.  Certain claims were found unsearchable (See Box II).

3.  Unity of invention is lacking (see Box III).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b.  none of the figures is to be published with the abstract.

**INTERNATIONAL SEARCH REPORT**

International Application No PCT/US2004/039766
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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 C07D409/14 C07D401/04 C07D213/82 C07D213/78 A61K31/4427  
A61K31/44

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BEILSTEIN Data, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/026305 A (ELI LILLY AND COMPANY; BLANCO-PILLADO, MARIA-JESUS; CHAPPELL, MARK, DO) 1 April 2004 (2004-04-01) Intermediates 23 and 24, Examples 380 and 386 and N-BOC protected precursors. the whole document	1-4,8-13
P,A	-----	1-25
X	WO 02/38544 A (ELI LILLY AND COMPANY; JESUDASON, CYNTHIA, DARSHINI; SALL, DANIEL, JON) 16 May 2002 (2002-05-16) page 32, amines 6,7 and 10.	1-4,7, 9-13
A	the whole document	1-25
P,A	WO 2004/080968 A (ELI LILLY AND COMPANY; PEDREGAL-TERCERO, CONCEPCION; SIEGEL, MILES, GO) 23 September 2004 (2004-09-23) the whole document	1-25
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

27 May 2005

Date of mailing of the international search report

03/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Von Daacke, A

## INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/039766

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	WO 2004/080996 A (ELI LILLY AND COMPANY; BLANCO-PILLADO, MARIA, JESUS; BENESH, DANA, RAE) 23 September 2004 (2004-09-23) the whole document -----	1-25
A	WO 00/40560 A (FUJISAWA PHARMACEUTICAL CO., LTD; TANIGUCHI, KIYOSHI; SAKURAI, MINORU;) 13 July 2000 (2000-07-13) the whole document -----	1-25
A	WO 98/09625 A (ELI LILLY AND COMPANY; CROWELL, THOMAS, A; EVRARD, DEBORAH, A; JONES,) 12 March 1998 (1998-03-12) the whole document -----	1-25

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2004/039766

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 19–23,25 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US2004/039766

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2004026305	A	01-04-2004	AU WO	2003269980 A1 2004026305 A1		08-04-2004 01-04-2004
WO 0238544	A	16-05-2002	AU AU CA EP JP WO WO US US	2432002 A 3413402 A 2421594 A1 1341759 A2 2004513164 T 0238543 A2 0238544 A2 2004097532 A1 2005054713 A1		21-05-2002 21-05-2002 16-05-2002 10-09-2003 30-04-2004 16-05-2002 16-05-2002 20-05-2004 10-03-2005
WO 2004080968	A	23-09-2004	WO	2004080968 A1		23-09-2004
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WO 0040560	A	13-07-2000	EP WO JP US US	1140849 A1 0040560 A1 2002534415 T 2002143034 A1 2005043358 A1		10-10-2001 13-07-2000 15-10-2002 03-10-2002 24-02-2005
WO 9809625	A	12-03-1998	AT AU CA DE DE EP ES ID JP US WO US US US ZA	215369 T 4094197 A 2236269 A1 69711519 D1 69711519 T2 0827746 A1 2171839 T3 17182 A 2002513387 T 6140352 A 9809625 A1 2002165234 A1 6413991 B1 2005043337 A1 9707917 A		15-04-2002 26-03-1998 12-03-1998 08-05-2002 31-10-2002 11-03-1998 16-09-2002 04-12-1997 08-05-2002 31-10-2000 12-03-1998 07-11-2002 02-07-2002 24-02-2005 03-06-1999